

POND DESIGN DATA

Job Class _____ Soils _____ Hydro. Gr. _____
Land Use _____ Trtmt. _____ Condition _____
Rainfall Dist. Type II or III DA _____ ac. W/S Slope _____ %
Slope Factor _____ Slope Interpolation factor (SIF) _____
CN _____ Rainfall (ps) _____ in. _____ yr. $V_r =$ _____ in.
 $V_s = [($ _____ ac. + _____ ac.) / 2] x _____ ft. = _____ AF
 V_s (in.) = $[(V_s)$ _____ AF x 12] / (DA) _____ AC = _____ in.
Use $V_s =$ _____ in. & $V_r =$ _____ in. FR Fig. 1, READ TAB A OR B
(II) $Q_i(ps) = [Q_{peak}(ps)]$ _____ cfs x (SIF) _____ = _____ cfs
(III) $I_a/P =$ _____; $Q_{peak}(ps) =$ _____ cfs/ac/in
 $Q_i(ps) = [Q_{peak}(ps)$ _____ x (V_r) _____ x (DA) _____ x (SIF) _____
 $Q_i(ps) =$ _____ cfs
 $Q_o(ps) = ($ TAB A or B) _____ x _____ cfs or ac. = _____ cfs
 $H =$ _____ ft. Pipe Size = _____ in. barrel; _____ in. riser
Rainfall (es) _____ in. _____ yr. R.O. (es) = _____ in.
(II) $Q_{es} = [Q_{peak}(es)]$ _____ cfs x (SIF) _____ = _____ cfs
(III) $I_a/P =$ _____; $Q_{peak}(es) =$ _____ cfs/ac/in
 $Q_{es} = [Q_{peak}(es)]$ _____ x [R.O.(es)] _____ x (DA) _____ x (SIF) _____
 $Q_{es} =$ _____ cfs
 $Q_{es}(\text{design}) = (Q_{es})$ _____ - $[Q_i(ps)]$ _____ = _____ cfs
Erosion Resistant Soil: (yes or no) Cover _____
Cond. Stand _____ Height _____ in. to _____ in. Slope _____ %
Vel. _____ fps Retardance: Stab. _____ Capacity _____
Control-Section Length = _____ ft. $q/ft. =$ _____
 $S/W\ BW = [Q_{es}(\text{design})]$ _____ / ($q/ft.$) _____ = _____ ft.
Use: BW = _____ ft. Hp = _____ ft. S/W SS = _____:1
Exit Slope Range: _____ to _____ Adequate _____
Embankment SS = _____:1 TW = _____ ft.
Freeboard = _____ ft. EI Riser _____ EI Emer S/W _____
EI Top of Dam _____ Settlement _____ % Pond Use _____
Capacity = 0.4 x _____ ac. x _____ ft. = _____ AF
Barrel _____ ft. of _____ in. _____ Pipe
Riser _____ ft. of _____ in. _____ Pipe
Valve _____ in. _____ Collars _____ ft.x _____ ft.x _____ ft.
Trash Rack or Sleeve _____ in. x _____ ft.
Flotation = (B) _____ - (W) _____ x (H) _____ / 87.6 = _____ CF
Concrete (PAD) _____ CF + (ASC) _____ CF / 27 = _____ CY
Quantity of Fill _____ CY Veg. _____ ac.
Design By _____ Checked By _____